



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,320	03/18/2004	Edward R. Rhoads	ITL.0308C1US (P7989C)	5772
21906	7590	09/15/2006	EXAMINER	
TROP PRUNER & HU, PC 1616 S. VOSS ROAD, SUITE 750 HOUSTON, TX 77057-2631			RAYYAN, SUSAN F	
			ART UNIT	PAPER NUMBER
			2167	

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,320

Applicant(s)

RHOADS ET AL.

Examiner

Susan F. Rayyan

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 31-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19, 31-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/18/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-19, 31-50 are pending.
2. Claims 20-30 are canceled.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The following displays the correspondence between US 10/803,320 claims and US 6,741,978 claims :

10/803,320	6,741,978	10/803,320	6,741,978
1	1	14	14
2	2	15	15
3	3	16	16
4	4	17	17
5	5	18	18
6	6	19	19
7	7		
8	8		
9	9		
10	10		
11	11		
12	12		
13	13		

10/803,320	6,741,978	10/803,320	6,741,978
31	1	40	20
32	2	42	22
33	3	43	23
34	4	44	24
35	5	45	25
36	6	46	26
37	7	47	27
38	8	48	28
39	9	49	29
		50	30

Claims 1-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,741,978.

Although the conflicting claims are not identical, they are not patentably distinct from each other because some limitations in US 6,741,978 are not recited in US 10/803,320. Some limitations including "receiving a request from a operating system for file data". However, it is well established that removal of elements is obvious.

Claims 31-39 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,741,978. Although the conflicting claims are not identical, they are not patentably distinct from

each other because some limitations in US 6,741,978 are not recited in US 10/803,320. Some limitations including "flash memory". Based on claim 21 of US Patent Number 6,741,978 semiconductor memory is flash memory.

Claims 40-50 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,741,978. Although the conflicting claims are not identical, they are not patentably distinct from each other because some limitations in US 6,741,978 are not recited in US 10/803,320. Some limitations including "flash memory" and "wherein said system is a cellular telephone". Based on claim 21 of US Patent Number 6,741,978 semiconductor memory is flash memory. The limitation "wherein said system is a cellular telephone" is taught by US Patent Number 6,407,949 issued to Sanjay Jha et al ("Jha"). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system to include a cellular telephone system with flash memory to improve access time and reduce power consumption (Abstract).

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter.

Claims 1-19, 31-50 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

MPEP 2106 IV.B.2. (b) A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. Schrader, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application. is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application.

Claims 1,31,40 in view of the above cited MPEP sections, are not statutory because they merely recite a number of computing steps without producing any tangible result and/or being limited to a practical application.

Claim 1, recites "accessing a semiconductor memory storing compressed data", and "locating said file data ...". The claim does not provide a tangible result. A tangible result, for example, would display or report or output the located file data to the user.

Claim 31, recites "receiving a request from a operating system for file data", accessing a flash memory ...", and "locating said file data on said flash memory using information stored in said flash memory". The claim does not provide for an obvious tangible result such as outputting, displaying or reporting the located file data to the user.

Claim 40, recites "a processor" and "a flash memory to store an operating system, compressed file data ...". The claim does not provide an obvious tangible result such as providing the located data to the user.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9, 10-15, 19, are rejected under 35 U.S.C. 102(b) as being anticipated by Miller et al. (US Patent Number 5,490,260).

Regarding independent claim 1, Miller et al. teaches the claimed invention of accessing a semiconductor memory storing compressed file data and locating file data on semiconductor memory using information stored on semiconductor memory (See col. 3, lines 58- col. 4, lines 17, wherein Miller et al. teaches the claimed limitation of locating the file on semiconductor memory with stored addresses.)

Regarding claims 2, same as claim augments above and Miller et al. teaches the claimed invention of decompressing the compressed file data as described in col. 4, lines 14-17.

Regarding claims 3, same as claim augments above and Miller et al. teaches a format for storing the data by CPU as described in col. 7, lines 58-61. Therefore it is inherent that the decompressed data is formatted in format compatible by the OS as claimed.

Regarding claims 4, same as claim augments above and Miller et al. teaches the claimed invention of storing decompressed data in a buffer as described in col. 9, lines 27-32.

Regarding claims 5, same as claim augments above and Miller et al. teaches the claimed invention of forming a block of data of equal size as described in col. 3, lines 14-18.

Regarding claims 6, same as claim augments above and Miller et al. teaches the claimed invention of forming a compressed block file of unequal size is described in col. 3, lines 27-45, wherein Miller et al. teaches the data blocks of various size to store compressed data.

Regarding claims 9, same as claim augments above and Miller et al. teaches the operating system being executed by CPU as described in col. 6, lines 55-58. It is inherent that operating system is accessed and since address information maintained by operating system is stored in semiconductor memory, it is inherent that operating system is stored in semiconductor memory.

Regarding claim 10, Miller et al. teaches the claimed invention of accessing a semiconductor memory storing compressed file data and locating file data on semiconductor memory using information stored on semiconductor memory (See col. 3, lines 58- col. 4, lines 17, wherein Miller et al. teaches the claimed limitation of locating the file on semiconductor memory with stored addresses.)

Regarding claim 11, same as claim augments above and Miller et al. teaches the claimed invention of decompressing the compressed file data as described in col. 4, lines 14-17.

Regarding claim 12, same as claim augments above and Miller et al. teaches a format for storing the data by CPU as described in col. 7, lines 58-61. Therefore it is inherent that the decompressed data is formatted in format compatible by the OS as claimed.

Regarding claim 13, same as claim augments above and Miller et al. teaches the claimed invention of storing decompressed data in a buffer as described in col. 9, lines 27-32.

Regarding claim 14, same as claim augments above and Miller et al. teaches the claimed invention of forming a block of data of equal size as described in col. 3, lines 14-18.

Regarding claim 15, same as claim augments above and Miller et al. teaches the claimed invention of forming a compressed block file of unequal size is described in col. 3, lines 27-45, wherein Miller et al. teaches the data blocks of various size to store compressed data.

Regarding claim 19, same as claim augments above and Miller et al. teaches the operating system being executed by CPU as described in col. 6, lines 55-58. It is inherent that operating system is accessed and since address information maintained by operating system is stored in semiconductor memory, it is inherent that operating system is stored in semiconductor memory.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7, 8, 16-18,31-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (US Patent Number 5,490,260) in view of Garner (US Patent Number 5, 337, 275).

Regarding claims 7, 8, 16-18 Miller et al. teaches the claimed invention as discussed above and Miller et al. does not specifically teach a header providing location information and length of the blocks. Garner does teach this limitation. Specifically Garner teaches the header as shown in fig 2, with a pointer to locate the file (col. 6, lines 1-5) and length (starting and ending points which determine the size of the sector at col. 7, lines 6-9). It also teaches the number of entries as described in col. 6, line 6. (revision number) Therefore it would have been obvious for a person with ordinary skill in the art at the time the invention was made to include a header and information on length in the method of Miller et al. because it allows condition of the sectors to be transferred thus aiding in determining error in data transfer.

Regarding independent claim 31, Miller et al. teaches the claimed invention of receiving a request from an operating system for file data, accessing a ... memory storing compressed file data and locating file data on ... memory using information stored on ... memory (See col. 3, lines 58- col. 4, lines 17, wherein Miller et al. teaches the claimed limitation of locating the file on semiconductor memory with stored addresses.)

Miller does not explicitly teach flash memory. Garner does teach flash memory as described in col. 1, lines 10-16. Therefore it would have been obvious for a person with ordinary skill in the art at the time the invention was made to implement the flash memory in the method of Miller et al. because it provides rugged, light weight memory option which occupies very little space.

Regarding claim 32, same as claim arguments above and Miller teaches further including decompressing said compressed file data as described in col. 4, lines 14-17.

Regarding claim 33 same as claim arguments above and Miller teaches including using a device driver to format the decompressed data in a format compatible with a file system utilized by said operating system as described in col. 7, lines 58-61.

Therefore it is inherent that the decompressed data is formatted in format compatible by the OS as claimed.

Regarding claim 34 same as claim arguments above and Miller teaches including storing the decompressed data in a buffer for use by a file system driver as described in col. 9, lines 27-32.

Regarding claim 35 same as claim arguments above and Miller teaches including forming a file system image of blocks of data of substantially equal size as described in col. 3, lines 14-18.

Regarding claim 36 same as claim arguments above and Miller teaches including compressing each of said blocks to form a compressed file system image formed of blocks of unequal size is described in col. 3, lines 27-45, wherein Miller et al. teaches the data blocks of various size to store compressed data.

Regarding claim 37 same as claim arguments above and Garner teaches including affixing a header to said file system image which provides information about how to locate each block (the header as shown in fig 2, with a pointer to locate the file, col. 6, lines 1-5).

Regarding claim 38 same as claim arguments above and Garner teaches including providing in said header information about the number of entries in an allocation table and providing in said allocation table information about the length of each of said compressed blocks in said file system image (starting and ending points which determine the size of the sector at col. 7, lines 6-9). It also teaches the number of entries as described in col. 6, line 6. (revision number).

Regarding claim 39 same as claim arguments above and Miller teaches including accessing an operating system stored in said semiconductor memory as described in col. 6, lines 55-58. It is inherent that operating system is accessed and since address information maintained by operating system is stored in memory, It is inherent that operating system is stored in semiconductor memory.

Regarding independent claim 40, Miller teaches a processor, a flash memory coupled to said processor, said flash memory to store an operating system, compressed file data, and information for use in locating said file data in said flash memory (See col. 3, lines 58- col. 4, lines 17, wherein Miller et al. teaches the claimed limitation of locating the file on semiconductor memory with stored addresses.)

Miller does not explicitly teach flash memory. Garner does teach flash memory as described in col. 1, lines 10-16 because it provides rugged, light weight memory option which occupies very little space. Therefore it would have been obvious for a person with ordinary skill in the art at the time the invention was made to implement the flash memory in the method of Miller et al. because it provides rugged, light weight memory option which occupies very little space.

7. Claims 41-42, 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (Patent # 5,490,260) in view of Garner (Patent # 5,337, 275) and further in view of US Patent Number 6,407,949 issued to Sanjay Jha et al ("Jha").

Regarding claim 41, same as claim arguments above and Miller and Garner do not explicitly teach wherein the system is a cellular telephone. Jha does teach this limitation at column 1, line 31 to improve access time and reduce power consumption. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system to include a cellular telephone system with flash memory to improve access time and reduce power consumption (Abstract).

Regarding claim 42, Miller et al. teaches the data stored in a compressed format (See col. 3, lines 58- col. 4, lines 17). It is inherent that it includes basic I/O data.

Regarding claims 44,45 Miller et al. teaches a format for storing the data by CPU as described in col. 7, lines 58-61. Therefore it is inherent that the decompressed data is formatted in format compatible by the OS as claimed.

Regarding claim 46 same as claim arguments above and Garner teaches: wherein said flash memory stores an allocation table to indicate the length of entries stored in said flash memory and the number of entries in said allocation table (fig 2, a pointer to locate the file ,col. 6, lines 1-5) and starting and ending points which determine the size of the sector (col. 7, lines 6-9). It also teaches the number of entries as described in col. 6, line 6. (revision number)

Regarding claim 47, same as claim arguments above and Miller et al. teaches the claimed invention of wherein said file data stored in compressed form on ... memory is formed into compressed blocks of unequal length is described in col. 3, lines 27-45, wherein Miller et al. teaches the data blocks of various size to store compressed data.

Regarding claim 48, same as claim arguments above and Garner teaches including data for more than one file system stored on said flash memory (the flash memory as described in col. 1, lines 10-16).

Regarding claim 49, Miller et al. teach the loader and kernel stored on memory as described in col. 4, lines 10-11.

Regarding claim 50 Miller et al. teaches the claimed invention as described above with respect to claims 40- 41. However, Miller et al. does not teach a network connection to download additional data. It is a common knowledge in the art to implement a network connection to download data from the remote site. Therefore it would have been obvious for a person with ordinary skill in the art at the time the invention was made to implement network connection to the system of Miller et al. because it aids in retrieving the data and downloading the data from remote location.

Allowable Subject Matter

8. Claim 43 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 43, the cited prior art fails to teach alone or in a combination the claimed invention of stored on said flash memory, a primary operating system and backup operating system for use when primary operating system fails to needs updating as claimed along with other features. Therefore the invention as claimed will be allowable if re-written in an independent form.

Contact Information


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Rayyan whose telephone number is (571) 272-1675. The examiner can normally be reached M-F: 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Susan Rayyan

September 12, 2006


JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100